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NEW TRINIDAD MYRMICINAE, WITH A NOTE ON *BASICEROS* SCHULZ (HYMENOPTERA, FORMICIDAE)

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Among the ants that I took in Trinidad, British West Indies, in 1934–1935 while a National Research Fellow in Biology at the Imperial College of Tropical Agriculture are several that doubtless belong to the archaic fauna of the island and probably were acquired when it was attached to the mainland. The *Lachnomyrmex* is the third species of the genus to be described, the first (*scrobiculatus* Wheeler) being known from Guatemala and the second (*haskinsi* M. R. Smith) from Panama. The new genus, *Aspididris*, I have realized to be new for over 10 years, and the fact that it has never been described or taken since (except for one specimen sent to me for identification several years ago) shows it to be a rare and highly localized relict. The Nariva Swamp, in which it was taken in 1935, preserves the rich Neotropical rain forest in excellent condition. It will undoubtedly be found on the mainland. The note on *Basiceros singularis* records this archaic ant from the luxuriant rain forest of the Northern Range in Trinidad, as well as from the virgin, uninhabited rain forest of the upper Courantyne basin of Guiana which contains Amazonian elements.

Lachnomyrmex pilosus, new species

Worker: Length extended 3.0 mm., of thorax 0.83 mm. Head in front view, excluding mandibles, slightly longer than broad

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back of eyes, occipital margin and sides convex, anterior clypeal margin distinctly emarginate medially; eyes large and convex, situated in front of middle of head; frontal scrobes deep and marginate, not quite receiving the entire length of the scapes; frontal lobes small and obtusely angulate; mandibles triangular, with convex lateral margins, cutting margin with five teeth including the tooth forming the junction between the cutting and basal margins, two apical teeth close together, the median tooth with a wide diastema on either side, the basal pair as close together as the apical pair; antennal scapes short, about 0.46 mm. long, funiculus with two-segmented club about 0.39 mm. long. Thorax globose above, nearly as broad as long between "collar" and meso-epinotal suture; meso-epinotal impression marked; epinotal spines long, straight, and acute, the space between concave; meta-sternal angles with an acute spine about half the length of the epinotal and of similar proportions. Petiole with distinct pedicel and node, the latter in side view with concave anterior and convex posterior faces meeting as a rounded angle; postpetiole convex above, distinctly broader than petiole. Gaster small and ovate. Legs long and slender.

Head, thorax, and nodes of pedicel deeply sculptured; head longitudinally rugose with punctations basally, mandibles punctate; thorax and nodes vermiculate-reticulate, basally punctate; gaster shining but with a faint, superficial punctation. Pilosity of abundant, long, flexuous hairs on legs and gaster as well as on body generally; funiculi with abundant but short hairs. Color dark ferruginous, appendages including mandibles markedly paler, being more a yellowish brown.

HOLOTYPE (A.M.N.H.): One worker, which I collected in Trinidad, British West Indies, August 5, 1935 (No. 260). The ant was taken on the northwest corner of the island at Macqueripe Bay about 2:30 P.M. It was at the base of a bamboo clump on the south slope of a steep gully, among moist, rotted leaves. The site was largely shaded, receiving sunshine only for several hours at midday. This is also the habitat of *Strumigenys*, certain *Cyphomyrmex* and *Apterostigma* among the Attini, and other ants.

Differing from a cotype of *scrobiculatus* Wheeler especially in finer sculpturing. Differing from the figures of *haskinsi* M. R. Smith in having the terminal antennal joint longer, the thorax more convex above, the petiolar node not excavated behind, and the postpetiolar node more evenly convex. The meso-epinotal

impression is bordered differently. These differences may be expressed in the following key:

1. Sculpturing coarsely rugulose to vermiculate-reticulate, metasternal spines triangular ..... *scrobiculatus*
   Sculpturing finer 2
2. Meso-epinotal impression bordered anteriorly on each side by a tubercle, petiolar node impressed behind, metasternal spines triangular .... *haskinsi*
   Meso-epinotal impression not tuberculate anteriorly, petiolar node convex above, metasternal spines acute, about half the length of the epinotal spines and of similar proportions ..... *pilosus*

ASPIDIDRIS,[1] NEW GENUS

Allied to *Basiceros* Schulz.

DEALATE FEMALE: Size moderate. Head shield shaped, with sides and occipital margin raised, the posterior border a convex crest; clypeus large, with transverse anterior margin covering the bases of the mandibles; eyes small, convex, situated at the lateral margins; frontal area raised, frontal carinae distant from one another and continuous with lateral margins; mandibles triangular, dentate, the basal margins covered by the clypeus; antennae 12-segmented, the scape flattened, broad and geniculate at the base, funicular segments short, the terminal segment markedly longer than the segments preceding. Epinotum bispinose or bidentate. Petiole pedunculate, surmounted by a rounded node. Gaster ovate, the anterior margin concave, articulating broadly with the postpetiole. Tibia broad and flattened, tarsi ending in a pair of long claws. Integument punctate, hairs simple to squamate or clavate, becoming long and narrow squamate on the appendages.

WORKER: Similar to female except for reduced ocelli and thoracic sutures.

Aspididris militaris, new species

FEMALE (DEALATE): Length extended 6 mm., of thorax, excluding "neck," 1.7 mm. Head in front view, including mandibles, ovate, greatest width coming at the posterior margin of the antennal scrobes; occipital margin evenly convex and raised as a crest; lateral margins converging sharply anteriorly to the antennal insertions and similarly raised, with a broad, deep, antennal scrobe extending to the occiput; anterior clypeal margin straight

[1] *Aspididris*, from Greek *aspis*, a shield, and *idris*, the knowing or provident one.

and extending laterally beyond the margins of the mandibles, anterior and lateral clypeal margins forming a rounded right angle, posterior margin convex and attaining a level with the antennal insertions; frontal area raised as a convex eminence extending to the peripheral crest; ocelli vestigial or absent; eyes small, 0.22 mm. in diameter, convex, embedded in the lateral margins; mandibles with only the dentate portion extending beyond the clypeus, this portion bearing 10 or 11 acutely pointed triangular teeth which increase in size distally, the exposed mandible being triangular and curved downwards; antennae 12-segmented, scape strongly and broadly geniculate, occupying entire antennal scrobe and extending to the occipital corners, terminal segment approximately equal in length to the preceding six taken together. Thorax in profile irregularly convex and flattened

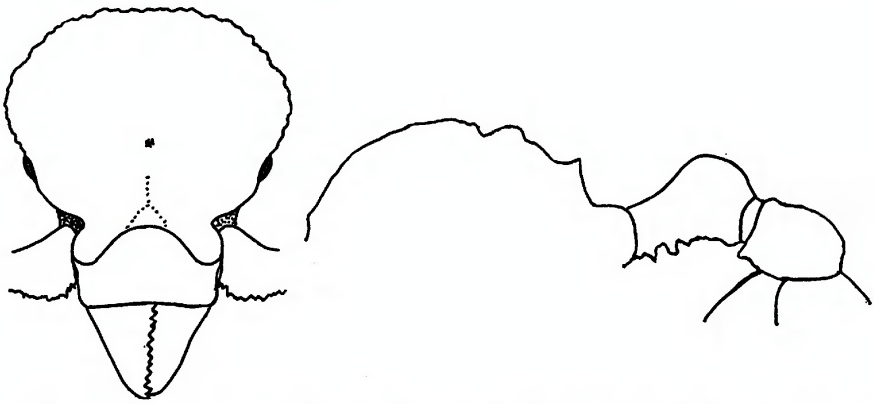

FIG. 1. Left: Frontal view of head of worker of *Aspididris militaris*, new species. Right: Lateral outline of thorax and pedicel of worker of *Aspididris militaris*, new species.

above, from above the sides appear converging from the pronotum posteriorly, the pronotum convex anteriorly; epinotal spines broad and triangular, episternal angles lobate, convex. Petiole pedunculate, in side view with node convex above, ventral margin with a bidentate lamina; postpetiole evenly convex above, nearly 1.5 times broader than petiole, anterior margin truncate, sides and posterior margin convex. Gaster ovate except for broadly concave anterior margin to receive the postpetiole which is broadly articulated with it, posteriorly acutely pointed with fine, exerted sting. Legs of moderate length, tibia stout, broader than femur, tarsi long and thin, terminating in a pair of long, fine claws.

Coarsely punctate, each punctation with a short hair which may be narrow, fine, and appressed or narrow-squamate, longer, and reclinate; abdomen with more numerous shallower and finer punctations, mandibles with finely piligerous punctations; sides of thorax and epinotum becoming smooth and shining ventrally. Posterior margins of head, petiolar nodes, and gastric segments and appendages with numerous reclinate to erect squamate hairs on narrow pedicles; these occur scattered on body generally and may be more clavate than squamate; integument of appendages covered so densely by the hairs as to be largely obscured. Color brownish black, appendages dark brown, pilosity a sordid brownish yellow.

WORKER: Length 5.7 mm., of thorax, excluding neck, 1.6 mm. Ocelli vestigial or absent except for a slight pit marking the anterior ocellus. Thorax with sutures suggesting those of female but in reduced and fused form, especially the promesothoracic sutures.

HOLOTYPE (A.M.N.H.): One dealate female, which I took in the Nariva Swamp, Trinidad, British West Indies, April 23, 1935. It was one of several of the same species that were found slowly stalking over the forest floor. The ants appeared typically basicerotine and dacetine in their gait and behavior, "feigning death" readily when disturbed and appearing practically invisible against humus. Paratypes in the Museum of Comparative Zoölogy and in my collection. The female ocelli are of variable size, attaining a maximum diameter of 0.04 mm. and situated in shallow pits much resembling the piligerous punctations of the head generally. One female (No. 139) has the thorax length, excluding neck, 1.8 mm. A paratype female (No. 140.1) has an oribatid-like mite attached to the left mesothoracic femur.

A NOTE ON *BASICEROS SINGULARIS* F. SMITH

On a brief visit to the British Museum (Natural History) in January, 1948, the ant carrying the type label of this species was examined. The label read: "Ceratobasis singularis Sm. type Journ. Ent. 1.78" and was stated by my colleague and keeper of the ant collection, Mr. Donisthorpe, to be in Kirby's writing. Above this was a second label carrying the numbers 59 and 2, 59 referring to the date of accession, 1859. The ant is an alate female *Trachymyrmex*, and there has evidently been a mix-up, perhaps in Kirby's day when he was caring for the collection in the nineteenth century. The specimen is heavily sculptured, is

ferruginous in color, and has the occipital margin emarginate medially; the mandibles are long and falcate; the antennal scapes do not quite reach the occipital angles; there are pronotal tubercles and epinotal spines; the sides of the gaster are marginate, and the gastric tubercles are confluent posteriorly. There is no resemblance to the ant described by Smith.

Ceratobasis of Smith, 1860, is preoccupied by Lacordaire, 1848, and is a synonym of *Basiceros* Schulz, 1906. Smith's *singularis* has been generally recognized by his and other drawings and specimens. I have taken *singularis* workers in the following localities:

Trinidad, British West Indies: Summit of Morne Bleu, 2781 feet, Northern Range (latitude 10° 44′ N., longitude 61° 15′ W.) December 2, 1934. From leaves and humus in dense shade under rain forest. This ant is doubtless a part of the ancient fauna of the island and probably restricted to the Northern Range. The species may well have been acquired when the island was connected with the mainland in the geologic past.

British Guiana: Oronoque River of the Courantyne system, July 26 and August 3, 1936. On the former date a worker was walking up an inclined dead log carrying a dead worker termite at 1 P.M. On the latter date a worker, probably of the same colony, was taken at 2 P.M. on the same log. It walked slowly and haltingly, as dacetines generally do, with the antennae much of the time held rigidly and horizontally in front. Between the two dates I had visited the log many times and hacked away much of the rotted wood in search of this and other interesting species but had not detected the nest. The region was one of high, virgin rain forest, uninhabited and characterized by Brazil nut and other trees typical of the Amazon basin, from which watershed it was separated by less than 100 miles.